FILE 'HOME' ENTERED AT 14:36:54 ON 06 APR 2006

=> file food
COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION
FULL ESTIMATED COST | 0.21 | 0.21

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=> s poultry fat and (swine or pig) (w) feed######
  14 FILES SEARCHED...
L1          37 POULTRY FAT AND (SWINE OR PIG) (W) FEED######

=> dup rem l1
DUPLICATE IS NOT AVAILABLE IN 'FEDRIP, FOREGE, NUTRACEUT'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
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L2           37 DUP REM L1 (0 DUPLICATES REMOVED)

=> d 1-37 bib ab

L2   ANSWER 1 OF 37  PROMT  COPYRIGHT 2006 Gale Group on STN

AN   2004:548662  PROMT
TI   Revision to four PPI commodity indexes for January 2004.
SO   PPI Detailed Report, (May 2004) pp. 5(139).
     ISSN: ISSN: 1099-2855.
PB   U.S. Bureau of Labor Statistics
DT   Newsletter
LA   English
WC   192944
     *FULL TEXT IS AVAILABLE IN THE ALL FORMAT*
AB     The March 18, 2004 release of Producer Price Index (PPI) data for
     January 2004 contained erroneous January index levels for four commodity
     index series: All commodities, farm products and processed foods and
     feeds, industrial commodities, and all commodities except farm products.
     These index series appear in table 3 of the PPI news release and in tables
     6 and 8 of the PPI Detailed Report. They also are available on the BLS Web
     site.
      THIS IS THE FULL TEXT: COPYRIGHT 2004 U.S. Bureau of Labor Statistics

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     N.E., Washington, DC 20212.

L2   ANSWER 2 OF 37  PROMT  COPYRIGHT 2006 Gale Group on STN

AN   2004:519838  PROMT
TI   Price movements March 2004.
SO   PPI Detailed Report, (March 2004) pp. 1(144).
     ISSN: ISSN: 1099-2855.
PB   U.S. Bureau of Labor Statistics
DT   Newsletter
LA   English
WC   195277
     *FULL TEXT IS AVAILABLE IN THE ALL FORMAT*
AB     The Producer Price Index for Finished Goods advanced 0.5 percent in
     March, seasonally adjusted. This increase followed a 0.1-percent gain in
     February and a 0.6-percent rise in January. At the earlier stages of
     processing, prices for both intermediate goods and crude goods moved up
     0.7 percent in March, after increasing 0.9 and 2.5 percent, respectively,
     in the prior month. (See table A.)
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     N.E., Washington, DC 20212.

L2   ANSWER 3 OF 37  PROMT  COPYRIGHT 2006 Gale Group on STN
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AN 2004:530815 PROMT
TI Price movements April 2004.
SO PPI Detailed Report, (April 2004) pp. 1(145).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 199613
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB The Producer Price Index for Finished Goods advanced 0.7 percent in April, seasonally adjusted. This increase followed a 0.5-percent rise in March and a 0.1 -percent gain in February. April prices for finished goods other than foods and energy went up 0.2 percent, the same rate of increase as in the previous month. At the earlier stages of processing, the intermediate goods index climbed 1.4 percent, compared with a 0.7-percent gain in March. Prices received by manufacturers of crude goods rose 3.0 percent, after advancing 0.7 percent in the preceding month. (See table A.)

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L2 ANSWER 4 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2004:510276 PROMT
TI Price movements February 2004.
SO PPI Detailed Report, (Feb 2004) pp. 1(143).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 194705
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB The Producer Price Index for Finished Goods edged up 0.1 percent in February, seasonally adjusted. This increase followed a 0.6-percent jump in January and a 0.2-percent increase in December. At the earlier stages of processing, prices received by manufacturers of intermediate goods rose 0.9 percent in February, after advancing 0.8 percent in January. The crude goods index increased 2.5 percent, compared with a 2.8-percent rise in the prior month. (See table A.)

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L2 ANSWER 5 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2003:745252 PROMT
TI New Producer Price Index for the insurance agencies and brokerages industry-SIC 6412.
SO PPI Detailed Report, (Jan 2003) pp. 9(167).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 261785
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB As part of an ongoing effort by the Bureau of Labor statistics (BLS) program to expand Producer Price Index (PPI) coverage of the service sector of the U.S. economy, a new price index for the insurance agencies and brokerages industry was introduced into the PPI in January 2003. This industry, SIC 6412--Insurance Agencies and Brokerages, appears in table 5

of this publication and is available online via the BLS homepage, http://www.bls.gov.
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L2 ANSWER 6 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2003:756214 PROMT
TI Recalculated seasonal adjustment factors and relative importance figures to be available on February 17, 2004.
SO PPI Detailed Report, (Dec 2003) pp. 7(153).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 224573
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB Each year with the release of PPI data for January, seasonal adjustment factors are recalculated to reflect price movements from the just-completed calendar year. This routine annual calculation may result in revisions to seasonally adjusted indexes for the previous 5 years. The following information will be available on February 17, 2004 (2 work days prior
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L2 ANSWER 7 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2003:744664 PROMT
TI NAICS conversion.
SO PPI Detailed Report, (Feb 2003) pp. 5(156).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 230032
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB The net output price indexes will be converted from the 1987 Standard Industrial Classification (SIC) basis to the 2002 North American Industry Classification System (NAICS) basis with the February 2004 release of January 2004 indexes. The NAICS conversion involves major definitional changes to many of the currently published SIC-based indexes. After the conversion to NAICS, SIC-based indexes will no longer be produced or published. Historical index data based on the NAICS publication structure will be available depending on the scope of the definitional changes between SIC and NAICS.
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L2 ANSWER 8 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2002:706961 PROMT
TI More retail trade industries added to the Producer Price Index.
SO PPI Detailed Report, (Jan 2002) pp. 9(170).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter

LA English
WC 243557
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB Price indexes for three more retail trade industries were added to the Producer Price Index (PPI) in December 2001, reflecting an ongoing effort to expand PPI coverage of the U.S. economy into areas other than mining and manufacturing. (Retail trade indexes for food stores, new car dealers, and miscellaneous retail establishments were added to the PPI in June 2000 and December 2000.) These newest PPIs, listed below by Standard Industrial Classification (SIC) code, appear in table 5 of the PPI Detailed Report and are available online via the BLS homepage (http://www.bls.gov).

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L2 ANSWER 9 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2002:809202 PROMT
TI Recalculated seasonal adjustment factors and relative importances to be available on February 18, 2003.
SO PPI Detailed Report, (Dec 2002) pp. 5(161).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 238883
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB Each year with the release of the PPI data for January, seasonal adjustment factors are recalculated to reflect price movements from the just-completed calendar year. This routine annual calculation may result in revisions to seasonally adjusted indexes for the previous 5 years. The following information will be available on February 18, 2003 (2 workdays prior to the release of PPI data for January 2003 on February 20):

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L2 ANSWER 10 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2002:756014 PROMT
TI New Producer Price Index for the television broadcasting industry--SIC 4833.
SO PPI Detailed Report, (15 Jul 2002) pp. 5(169).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 240116
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB As part of an on going effort by the Bureau of Labor Statistics (BLS) to expand Producer Price Index (PPI) coverage of the services sector of the U.S. economy, a new price index for the television broadcasting industry was introduced into the PPI in July 2002. This index, SIC 4833--Television Broadcasting Stations, appears in table 5 of this publication and is available online via the BLS homepage (http://www.bls.gov).

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L2 ANSWER 11 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2002:807214 PROMT
TI Report on quality changes for 2003 model vehicles.
SO PPI Detailed Report, (Oct 2002) pp. 5(157).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 273342
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB Passenger cars

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L2 ANSWER 12 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2002:808560 PROMT
TI Price movements November 2002.
SO PPI Detailed Report, (Nov 2002) pp. 1(160).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 241424
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB The Producer Price Index for Finished Goods decreased 0.4 percent in November, seasonally adjusted. This decline followed a 1.1-percent increase in October and a 0.1-percent gain in September. Falling prices for gasoline and passenger cars led the decline in the finished goods index in November. At the earlier stages of processing, prices received by intermediate goods manufacturers fell 0.1 percent, after moving up 0.7 percent in October. The crude goods index advanced 5.1 percent in November, following a 3.4-percent increase in the previous month. (See table A.)

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L2 ANSWER 13 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2002:739147 PROMT
TI Price movements March 2002.
SO PPI Detailed Report, (March 2002) pp. 1(165).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 244989
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB The Producer Price Index for Finished Goods advanced 1.0 percent in March, seasonally adjusted. This increase followed a 0.2-percent increase in February and a 0.1-percent rise in January. The intermediate goods index advanced 1.0 percent in March, after dropping 0.1 percent in the prior month. Prices received by producers of crude goods rose 4.0 percent, following a 0.8-percent decline in February. (See table A.)

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L2 ANSWER 14 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2002:741524 PROMT
TI Price movements April 2002.
SO PPI Detailed Report, (April 2002) pp. 1(164).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 243555
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB The Producer Price Index for Finished Goods declined 0.2 percent in April, seasonally adjusted. This decrease, which was led by a drop in consumer food prices, followed a 1.0-percent increase in March and a 0.2-percent gain in February. The index for finished goods other than foods and energy rose 0.1 percent, the same rate of increase as in March. Prices for intermediate goods moved up 0.9 percent in April, following a 1.0-percent advance in March. The crude goods index rose 5.5 percent in April, after increasing 4.0 percent in the previous month. (See table A.)

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L2 ANSWER 15 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2002:721315 PROMT
TI Price movements February 2002.
SO PPI Detailed Report, (Feb 2002) pp. 1(164).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 243346
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB The Producer Price Index for Finished Goods increased 0.2 percent in February, seasonally adjusted. This rise followed a 0.1-percent advance in January and a 0.6-percent decrease in December. At the earlier stages of processing, prices for intermediate goods edged down 0.1 percent in February, after a similar decline in the prior month, and the crude goods index turned down 0.8 percent, following a 3.7-percent increase in January. (See table A.)

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L2 ANSWER 16 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2001:1177870 PROMT
TI New Producer Price Indexes for security brokers, dealers, and investment banking companies--SIC 6211.
SO PPI Detailed Report, (Jan 2001) pp. 9(177).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 251909
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB Effective with the release of data for January 2001, the Producer Price Index (PPI) introduced indexes for financial services industry SIC 6211-Security Brokers, Dealers, and Investment Banking Companies. This is the PPI's inaugural publication in the financial sector and reflects the

ongoing efforts to expand coverage beyond the mining and manufacturing sectors of the economy. These new indexes appear in table 5 of the PPI Detailed Report and are available online via the BLS homepage (http://stats.bls.gov). The SIC 6211 service lines for which indexes are available include:

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L2 ANSWER 17 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2001:1124053 PROMT
TI One-Month Lag in Producer Price Indexes for Liquefied Petroleum Gas Removed.(Statistical Data Included)
SO PPI Detailed Report, (July 2001) pp. 6.
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 242004
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB Effective with this report, the 1-month lag in the Producer Price Index (PPI) for Liquefied Petroleum Gas, commodity code 05-32, has been eliminated. Since 1971, the liquefied petroleum gas index has been calculated with prices that lag behind the index reference date by 1 month. For example, the PPI for January contains liquefied petroleum gas prices for December.

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L2 ANSWER 18 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2001:1129972 PROMT
TI One-Month Lag in Producer Price Indexes for Liquefied Petroleum Gas to Be Removed Effective with Data for July 2001.
SO PPI Detailed Report, (June 2001) pp. 6.
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 249148
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB Effective with the release of data for July 2001, the 1-month lag in the Producer Price Index (PPI) for Liquefied Petroleum Gas, commodity code 05-32, will be eliminated. Since 1971, the liquefied petroleum gas index has been calculated with prices that lag behind the index refference date by one month. For example, the PPI for January contains liquefied petroleum gas prices for December.

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L2 ANSWER 19 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2001:1169935 PROMT
TI PPI weights to be updated.
SO PPI Detailed Report, (Oct 2001) pp. 6(163).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics

DT Newsletter
LA English
WC 244289
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB The Bureau of Labor Statistics will soon update the value weights used to calculate Producer Price Indexes to more accurately reflect recent production and marketing patterns. The new weights, which will be introduced in February 2002 with the release of January 2002 index data, will be based on shipment values from the year 1997. These value weights come from the Census of Manufactures, the Census of Mining, the Census of Services, and the Census of Agriculture. PPI weights have been based upon 1992 census shipment values since January 1996.

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L2 ANSWER 20 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2001:1171079 PROMT
TI PPI weights to be updated.
SO PPI Detailed Report, (Nov 2001) pp. 5(161).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 244259
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB The Bureau of Labor Statistics will soon update the value weights used to calculate Producer Price Indexes to more accurately reflect recent production and marketing patterns. The new weights, which will be introduced in February 2002 with the release of January 2002 index data, will be based on shipment values from the year 1997. These value weights come from the Census of Manufactures, the Census of Mining, the Census of Services, and the Census of Agriculture. PPI weights have been based upon 1992 census shipment values since January 1996.

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L2 ANSWER 21 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2001:1133054 PROMT
TI One-Month Lag in Producer Price Indexes for Liquefied Petroleum Gas to Be Removed Effective with Data for July 2001.
SO PPI Detailed Report, (April 2001) pp. 4.
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 250112
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB Effective with the release of data for July 2001, the 1-month lag in the Producer Price Index (PPI) for Liquefied Petroleum Gas, commodity code 05-32, will be eliminated. Since 1971, the liquefied petroleum gas index has been calculated with prices that lag behind the index reference date by 1 month. For example, the PPI for January contains liquefied petroleum gas prices for December.

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L2 ANSWER 22 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2001:1166209 PROMT
TI Price movements September 2001.
SO PPI Detailed Report, (Sept 2001) pp. 1(166).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 251244
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB The Producer Price Index for Finished Goods increased 0.4 percent in September, seasonally adjusted. This advance followed a 0.4-percent rise in August and a 0.9-percent decline in July. The index for finished goods other than foods and energy turned up 0.3 percent in September, compared with a 0.1-percent decrease in the preceding month. At the earlier stages of processing, prices received by intermediate goods producers increased 0.1 percent, following a 0.4-percent drop in August. The crude goods index fell 4.1 percent in September, after posting a 2.3-percent decrease a month earlier. (See table A.) The reference date for the Producer Price Index is the Tuesday of the week containing the 13th day of the month. September's reference date was Tuesday, September 11; price changes that occurred subsequent to the reference date are not reflected in these data. Survey respondents provided data to the Bureau at approximately the same rate in September as they did in prior months.

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L2 ANSWER 23 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2001:1158405 PROMT
TI Price movements August 2001.
SO PPI Detailed Report, (August 2001) pp. 1(165).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 247998
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB The Producer Price Index for Finished Goods increased 0.4 percent in August, seasonally adjusted. This index posted a 0.9-percent decline in July and fell 0.4 percent in June. The index for finished goods other than foods and energy decreased 0.1 percent in August, after rising 0.2 percent a month ago. At the earlier stages of processing, prices received by intermediate goods producers declined 0.4 percent, following a 1.0-percent drop in July. August's crude goods index fell 2.3 percent, compared with a 5.3-percent decrease in July. (See table A.)

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L2 ANSWER 24 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2001:1133049 PROMT
TI Price Movements February 2001.
SO PPI Detailed Report, (Feb 2001) pp. 1.
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter

LA English
WC 254496
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB The Producer Price Index for Finished Goods edged up 0.1 percent in February, seasonally adjusted. This rise followed a 1.1-percent increase in January and a 0.2-percent gain in December. At the earlier stages of processing, prices received by producers of intermediate goods edged down 0.1 percent, following a 0.7-percent rise in the prior month, while the crude goods index decreased 14.2 percent, after jumping 13.9 percent a month ago. (See table A.)

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L2 ANSWER 25 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2000:1301199 PROMT
TI Recalculation of seasonal adjustment factors.
SO PPI Detailed Report, (Jan 2000) pp. 9(178).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 263705
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB Effective with this report, seasonal adjustment factors have been recalculated to reflect 1999 price movement patterns for stage-of-processing (SOP) and commodity groupings. This routine annual recalculation may affect affect seasonally adjusted indexes and percent changes from January 1995 to the present. Revised seasonally adjusted data for this period, as well as seasonal factors for commodity indexes to be used through December 2000, are available, on request, from BLS. The table below shows 1999 monthly seasonally adjusted percent changes for the three major SOP categories calculated with the old seasonal factors, compared with the percent changes for recalculated indexes. The latter incorporate new seasonal factors that reflect 1999 price movement patterns.

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L2 ANSWER 26 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2000:1301354 PROMT
TI Improvements in the PPI for physicians.
SO PPI Detailed Report, (Feb 2000) pp. 8(170).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 262702
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB Changes in the Publication Structure

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L2 ANSWER 27 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2000:1301366 PROMT
TI Impact of the transition to the Medicare Home Health Prospective Payment

System.
SO PPI Detailed Report, (Oct 2000) pp. 7(170).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 257684
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB Effective with the release of October 2000 data, the Producer Price Index (PPI) will change the method of calculating net transaction prices for the Medicare portion of the home health care industry. As of October 1, 2000, all providers must bill for home health care services delivered to Medicare beneficiaries using the new Home Health Prospective Payment System (HH PPS).

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L2 ANSWER 28 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2000:1301851 PROMT
TI Recalculated seasonal adjustment factors and relative importances to be available on February 14, 2001.
SO PPI Detailed Report, (Dec 2000) pp. 6(169).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 256900
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB Each year with the release of PPI data for January, seasonal adjustment factors are recalculated to reflect price movements from the just-completed calendar year. This routine annual calculation may result in revisions to seasonally adjusted indexes for the previous 5 years. The following information will be available on February 14, 2001 (2 work days prior to the release of PPI data for January 2001 on February 16):

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L2 ANSWER 29 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2000:1301361 PROMT
TI Quality adjustment for changes to gasoline resulting from the reformulated gasoline program, phase 2.
SO PPI Detailed Report, (August 2000) pp. 5(169).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 258322
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB Congress enacted major amendments to the Clean Air Act in 1990 (CAA90). Included in the provisions of CAA90 was the reformulated motor gasoline (RFG) program that required reductions in automobile emissions in those areas of the country in which the Environmental Protection Agency (EPA) determined that air pollution was most severe. Phase 2 of the RFG program (RFG2) requires stricter summertime emission standards beginning May 1, 2000. Because this cleaner burning gasoline represents a quality improvement, it is appropriate to apply a quality adjustment to ensure that the Producer Price Index (PPI) for motor gasoline is tracking only

pure price changes and is not biased by the new quality change.
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Subscription: $56.00 per year. Published monthly. 2 Massachusetts Ave., N.E., Washington, DC 20212.

L2 ANSWER 30 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2000:1301843 PROMT
TI Price movements June 2000.
SO PPI Detailed Report, (June 2000) pp. 1(173).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 262393
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB The Producer Price Index for Finished Goods advanced 0.6 percent in June, seasonally adjusted. This index showed no change in May and declined 0.3 percent in April. The index for finished goods other than foods and energy fell 0.1 percent in June, after registering a 0.2-percent gain in the prior month. Prices received by producers of intermediate goods increased 0.9 percent, following a 0.1-percent decrease a month earlier. The crude goods index rose 5.8 percent, after posting a 3.2-percent advance in the previous month. (See table A.)
THIS IS THE FULL TEXT: COPYRIGHT 2000 U.S. Bureau of Labor Statistics

Subscription: $56.00 per year. Published monthly. 2 Massachusetts Ave., N.E., Washington, DC 20212.

L2 ANSWER 31 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2000:1301356 PROMT
TI Price movements March 2000.
SO PPI Detailed Report, (March 2000) pp. 1(173).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 263803
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB The Producer Price Index for Finished Goods increased 1.0 percent in March, seasonally adjusted. This rise followed a 1.0-percent rise in February and no change in January. Prices received by producers of intermediate goods rose 0.9 percent, following a 0.8-percent gain in the prior month. The crude goods index increased 1.8 percent, after a 4.2-percent advance February. (See table A.)
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Subscription: $56.00 per year. Published monthly. 2 Massachusetts Ave., N.E., Washington, DC 20212.

L2 ANSWER 32 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2000:1301358 PROMT
TI Price movements April 2000.
SO PPI Detailed Report, (April 2000) pp. 1(173).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 267524
FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB The Producer Price Index for Finished Goods declined 0.3 percent in April, seasonally adjusted. This decrease followed increases of 1.0 percent in February and March. The index for finished goods other than foods and energy rose 0.1 percent, the same as a month ago. Prices received by producers of intermediate goods fell 0.1 percent, after posting a 0.9-percent gain in the prior month. The crude goods index turned down 2.5 percent, following a 1.8-percent advance a month earlier. (See table A.)

Subscription: $56.00 per year. Published monthly. 2 Massachusetts Ave., N.E., Washington, DC 20212.

L2 ANSWER 33 OF 37 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2000:1301841 PROMT
TI Price movements May 2000.
SO PPI Detailed Report, (May 2000) pp. 1(173).
ISSN: ISSN: 1099-2855.
PB U.S. Bureau of Labor Statistics
DT Newsletter
LA English
WC 263605
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB The Producer Price Index for Finished Goods showed no change in May, seasonally adjusted. This followed a 0.3-percent decrease in April and a 1.0-percent gain in March. The index for finished goods other than foods and energy rose 0.2 percent, after increasing 0.1 percent for 2 consecutive months. Prices received by producers of intermediate goods fell 0.1 percent, the same rate as last month. The crude goods index turned up 3.2 percent, following a 2.5-percent decline a month earlier. (See table A.)

Subscription: $56.00 per year. Published monthly. 2 Massachusetts Ave., N.E., Washington, DC 20212.

L2 ANSWER 34 OF 37 CABA COPYRIGHT 2006 CABI on STN
AN 2001:15626 CABA
DN 20003021539
TI **Pig feeding**: use of oils and effects on production parameters
Porcino alimentacion: empleo de grasas y efectos en los indices productivos
AU Rincon, J. R. G. del; del Rincon, J. R. G.
SO Mundo Ganadero, (2000) Vol. 11, No. 127, pp. 30-32, 34.
Publisher: Eumedia S.A. Madrid
ISSN: 0214-9192
CY Spain
DT Journal
LA Spanish
ED Entered STN: 1 Feb 2001
Last Updated on STN: 1 Feb 2001
AB The composition and nutritive value of oils from soyabeans, sunflowers, maize, olives and coconuts, as well as cattle suet, pig lard, and **poultry fat** are described. The effects of their use in **pig feeds** on reproduction, composition of sow milk, piglet mortality, and fattening performance are discussed.

L2 ANSWER 35 OF 37 FROSTI COPYRIGHT 2006 LFRA on STN
AN 429255 FROSTI
TI Performance of animal by-products.
AU Woodgate S.

SO National Renderers' Association Bulletin, 1996, (808), 6-7 (0 ref.)
DT Journal
LA English
AB This article reviews the results of four studies into the use of animal by-products in pig and poultry feed. The following studies are reviewed: the use of a blend of rendered animal by-products as an alternative to soya-bean meal in turkey feed; the dietary availability of phosphorus to turkeys from meat and bone meal; the utilisation of low-linoleic acid fat in pigs with low and high levels of immune system activation; and a review of the standards used to determine the quality of fats used in animal feeds.

L2 ANSWER 36 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1986:459858 CAPLUS
DN 105:59858
TI Fat additive in animal nutrition
AU Yanovich, V. G.
CS UkrNII Fiziol. Biokhim. S-kh. Zhivotn., USSR
SO Zhivotnovodstvo (1986), (5), 39-42
CODEN: ZHIVAL; ISSN: 0044-4480
DT Journal
LA Russian
AB Expts. on the effect of supplementation of diets of weaning piglets, growing and finishing pigs, pregnant sows, broiler chicks, and laying hens are summarized, and recommendation for usage of fat additives in nutrition of livestock and poultry are given.

L2 ANSWER 37 OF 37 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1978:405066 CAPLUS
DN 89:5066
TI A comparison of poultry and animal fat on performance, body composition and tissue lipids of swine
AU Seerley, R. W.; Briscoe, J. P.; McCampbell, H. C.
CS Univ. Georgia, Athens, GA, USA
SO Journal of Animal Science (Savoy, IL, United States) (1978), 46(4), 1018-23
CODEN: JANSAG; ISSN: 0021-8812
DT Journal
LA English
AB In feeding trials with weanling pigs, average daily gains were not influenced by either fat source or fat level (0-5%) of the ration. The feed/gain ratio was not different between fat sources, but increasing fat improved the feed/gain ratio. Neither source nor fat level affected gross carcass composition, although 5.0% fat caused more backfat to be deposited on the carcass when compared to the control and 2.5% fat diets. Fat source and level did not influence percentages of total lipids in the longissimus muscle. Diets containing **poultry fat** appeared to give lower oleic acid [112-80-1] and higher linoleic acid [60-33-3] contents in the i.m. fat of the longissimus muscle when compared to the effect of dietary animal fat on i.m. fat. I.m. fat in longissimus muscle from carcasses of pigs fed the high-fat diets contained more linoleic acid than the other treatments and more total unsatd. fatty acids but less stearic acid [57-11-4] than control carcasses.

FILE 'HOME' ENTERED AT 15:14:49 ON 06 APR 2006

=> file food
COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION
FULL ESTIMATED COST | 0.21 | 0.21

FILE 'AGRICOLA' ENTERED AT 15:14:58 ON 06 APR 2006

FILE 'BIOSIS' ENTERED AT 15:14:58 ON 06 APR 2006

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FILE 'DISSABS' ENTERED AT 15:14:58 ON 06 APR 2006

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FILE 'PROMT' ENTERED AT 15:14:58 ON 06 APR 2006

FILE 'SCISEARCH' ENTERED AT 15:14:58 ON 06 APR 2006

FILE 'TOXCENTER' ENTERED AT 15:14:58 ON 06 APR 2006
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=> s (swine or pig) and hydrogenated fat and feed
L1 41 (SWINE OR PIG) AND HYDROGENATED FAT AND FEED

=> s (swine or pig) and hydrogenated fat and feed######
L2 62 (SWINE OR PIG) AND HYDROGENATED FAT AND FEED######

=> dup rem l2
DUPLICATE IS NOT AVAILABLE IN 'FEDRIP, FOREGE, NUTRACEUT'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L2
L3 35 DUP REM L2 (27 DUPLICATES REMOVED)

=> d 1-35 bib ab

L3 ANSWER 1 OF 35 CABA COPYRIGHT 2006 CABI on STN DUPLICATE 1
AN 2005:144589 CABA
DN 20053138357
TI Effects of chemical hydrogenation of supplemental fat on relative apparent lipid digestibility in finishing **swine**
AU Gatlin, L. A.; See, M. T.; Odle, J.
CS Department of Animal Science, North Carolina State University, Raleigh, NC 27695-7621, USA. jack_odle@ncsu.edu
SO Journal of Animal Science, (2005) Vol. 83, No. 8, pp. 1890-1898. 30 ref.
Publisher: American Society of Animal Science. Savoy
ISSN: 0021-8812
CY United States
DT Journal
LA English
ED Entered STN: 2 Sep 2005
Last Updated on STN: 2 Sep 2005
AB Four experiments were conducted to evaluate lipid digestibility in finishing **swine** fed chemically **hydrogenated fats**. Dietary chromic oxide was used as an inert marker to measure the apparent digestibility of supplemental fat (SF) that consisted of fully hydrogenated (FH), partially hydrogenated (PH), or PH products blended with other fat sources. In Exp. 1, diets containing 5% SF (as-fed basis) comprising 100, 66.7, 33.3, or 0% FH animal fat (iodine value=2.5), with the balance contributed by soy oil, were fed to gilts (n=24). Apparent digestibility increased linearly (-12.0, 26.0, 61.2, and 72.6%; P<0.001) as the amount of FH fat in the diet decreased, suggesting the digestibility of FH to be near zero. Experiment 2 (2x4 factorial; n=48) evaluated diets containing 5% (as-fed basis) blended fat (FH tallow and yellow grease) to achieve iodine values of 20, 30, 40, or 50 compared with PH tallow with identical iodine values. Digestibility of diets formulated with PH tallow was greater than those containing blended fat (73.4 vs. 67.2%; P<0.01), especially at lower iodine values (interaction; P<0.10). In Exp. 3, digestibility was measured in **pigs** (n=96) fed 5% (as-fed basis) PH choice white grease with iodine values of 20, 40, 60, or 80. Increasing iodine value did not alter digestibility (66.2, 69.2, 68.2, and 69.7%). Experiment 4 investigated digestibility (n=32) of diets formulated with 8% (as-fed basis) PH fat (iodine value 20 or 50) with 0.10% lysolecithin as an emulsifier. Lipid digestibility was 14.5% greater in the 8% SF diet with an iodine value of 50 compared with the diet with an iodine value of 20 (79.15 vs. 69.12%; P<0.001), but lysolecithin was without effect. These experiments indicate that partial hydrogenation is superior to blending unsaturated fat with saturated fat sources and that digestibility is not greatly affected by decreasing the iodine value via partial hydrogenation.

L3 ANSWER 2 OF 35 FROSTI COPYRIGHT 2006 LFRA on STN
AN 680175 FROSTI
TI Effect of **feeding** partially hydrogenated lard on trans-fatty acid content of muscle and backfat of heavy **pigs**.
AU Bochicchio D.; Faeti V.; Marchetto G.; Poletti E.; Maranesi M.; Mordenti A.L.; Della Casa G.
SO Meat Science, 2005, (December), 71 (4), 651-656 (27 ref.)
Published by: Elsevier Science. Website: http://www.elsevier.com/locate/meatsci
ISSN: 0309-1740
DT Journal
LA English
SL English
AB Fat from vegetable oils or lard can be incorporated into diets for heavy **pigs** to increase their energy intake during the finishing period, but high levels of linoleic acid make the subcutaneous fat less suitable for ham production. Partial hydrogenation of lard lowers linoleic acid content, but increases trans-fatty acid content. This trial found **pigs** fed diets containing 3% lard or 3% partially hydrogenated lard (PHL, containing about 10% trans-fatty acids and 2.5% linoleic acid) for the last 2 months before slaughter to have similar rearing performance and carcass characteristics. PHL **pigs** have less linoleic acid in the back fat (12.28% vs. 13.04%), but more C18:1 trans-fatty acids in back fat (0.5% vs. 0.06%) and intramuscular fat (0.2% vs. 0.04%).

L3 ANSWER 3 OF 35 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
DUPLICATE 2
AN 2004:246047 BIOSIS
DN PREV200400245173
TI Hydrogenated dietary fat improves pork quality of **pigs** from two lean genotypes.
AU Gatlin, L. Averette; See, M. T.; Hansen, J. A.; Odle, J. [Reprint Author]
CS Department of Animal Science, North Carolina State University, Rm 226, Polk Hall, Box 7621, Raleigh, NC, 27695-7621, USA
jack_odle@ncsu.edu
SO Journal of Animal Science, (August 2003) Vol. 81, No. 8, pp. 1989-1997. print.
ISSN: 0021-8812 (ISSN print).
DT Article
LA English
ED Entered STN: 6 May 2004
Last Updated on STN: 6 May 2004
AB Pork quality is influenced by nutrition, genetics, management, and pork-processing procedures. **Pigs** of lean genotype fed diets high in unsaturated fat may have thinner, lower-quality bellies with a soft fat composition. Therefore, we investigated the effects of supplementing 5% choice white grease that had been chemically hydrogenated to iodine values of 80, 60, 40, or 20 on pork quality. Diets were fed to barrows and gilts of two genotypes (NPD (Ham-lineXManor hybrid) and PIC (406, 419, or 420XC22); n=240) in a 4X2X2 factorial design. **Pigs** (76.8 kg of mean initial weight) were placed on test at a common age and were fed dietary treatments for 52 d. **Pigs** of PIC genotype were heavier at trial initiation, had higher **feed** intake and **feed** conversion ratio (F/G; P<0.05), and greater backfat (26.3 vs. 24.0 mm; P<0.001) and loin depth (59.0 vs. 55.3 mm; P<0.001) compared with the NPD genotype **pigs**. As the iodine value of dietary fat was reduced, belly thickness increased (P<0.05) and length decreased linearly (P<0.05). Congruently, belly fat iodine value decreased from 73.9 to 67.4 (linear effect; P<0.001) and belly fat C18:2 concentration declined from 20.6 to 16.3% (linear and quadratic effect; P<0.001). The belly mono- and polyunsaturated fat ratio increased 29% as diet iodine value declined from 80 to 20 (linear and quadratic effect; P<0.001). Further, there was a

linear increase (P<0.001) in saturated fatty acid concentration of belly fat (C14:0, C16:0, and C18:0) as dietary fat iodine value declined. Quadratic (P<0.005) effects were detected in the level of C18:1trans as iodine value decreased from 80 to 20, paralleling dietary content. Dietary fat iodine value did not affect fat digestibility, ADFI, or F/G. Pork belly quality was improved as defined by reduced iodine value, C18:2 content, increased saturated fatty acid content, increased thickness, and decreased length as dietary iodine value decreased. Results indicate that reduction of dietary fat iodine value by chemical hydrogenation has the desirable effect of improving pork quality and does not alter growth performance.

L3 ANSWER 4 OF 35 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on STN
AN 2002:784702 SCISEARCH
GA The Genuine Article (R) Number: 597ZU
TI Effects of **feeding pigs** increasing levels of C 18 : 1 trans fatty acids on fatty acid composition of backfat and intramuscular fat as well as backfat firmness
AU Glaser K R; Wenk C; Scheeder M R L (Reprint)
CS ETH Zentrum LFW, CH-8092 Zurich, Switzerland (Reprint); Agr & Agri Food Canada, Meat Res Sect, Lacombe Res Ctr, Lacombe, AB, Canada; Swiss Fed Inst Technol, Inst Anim Sci, Zurich, Switzerland
CYA Switzerland; Canada
SO ARCHIVES OF ANIMAL NUTRITION-ARCHIV FUR TIERERNAHRUNG, (APR 2002) Vol. 56, No. 2, pp. 117-130.
ISSN: 0003-942X.
PB TAYLOR & FRANCIS LTD, 4 PARK SQUARE, MILTON PARK, ABINGDON OX14 4RN, OXON, ENGLAND.
DT Article; Journal
LA English
REC Reference Count: 32
ED Entered STN: 18 Oct 2002
Last Updated on STN: 18 Oct 2002
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS
AB Forty Large White **pigs** were fed from 30 kg to 103 kg body mass on diets supplemented with 6% of pure high-oleic sunflower oil (HO) or HO plus increasing amounts of partially hydrogenated rape seed oil (HR; 1.85%, 3.70%, 5.55%), containing high levels of Delta6 to Delta11 C 18:1 trans fatty acid isomers. Increasing dietary C 18: trans fatty acids resulted in a linear increase in C 18:1 trans fatty acids and conjugated linoleic acid (cis-9, trans-11 CLA) in backfat (BF) as well as in neutral lipids (NL) and phospholipids (PL) of M. long. dorsi. Thus, the rate of bioconversion of trans vaccenic acid (TVA) into CLA and incorporation of C 18:1 trans and CLA into **pig** adipose tissue was not limited up to 25 g total C 18:1 trans fatty acids including 3.3 g of TVA per kg **feed**. BF was higher in C 18:1 trans fatty acids and CLA than M. long. dorsi NL and PL. In BF and NL the sum of saturated fatty acids (SFA) increased with increasing dietary amounts of HR, while in PL SFA were reduced. Thus, according to their physical properties, C 18:1 trans fatty acids partly replaced SFA in PL. Firmness of backfat was also significantly increased (P < 0.05) with increasing amounts of HR in **feed**.

L3 ANSWER 5 OF 35 CABA COPYRIGHT 2006 CABI on STN DUPLICATE 3
AN 2003:169676 CABA
DN 20033148180
TI Effect of dietary mono- and polyunsaturated fatty acids on the fatty acid composition of **pigs**' adipose tissues
AU Glaser, K. R.; Wenk, C.; Scheeder, M. R. L.
CS Institute of Animal Sciences, Nutrition Biology, ETH, Zurich, Switzerland.
SO Archives of Animal Nutrition, (2002) Vol. 56, No. 1, pp. 51-65.
Publisher: Taylor & Francis Ltd. Abingdon

ISSN: 0003-942X
URL: http://taylorandfrancis.metapress.com/app/home/contribution.asp?wasp=n1dprjyxmq5e7a768x2m&referrer=parent&backto=issue,6,6;journal,11,11;linkingpublicationresults,id:300196,1
CY United Kingdom
DT Journal
LA English
ED Entered STN: 3 Oct 2003
Last Updated on STN: 3 Oct 2003
AB In two experiments with growing-finishing **pigs** six different dietary fats were added to a conventional diet (control - C) to study the effects of dietary monounsaturated (MUFA) and polyunsaturated fatty acids (PUFA) on the fatty acid composition of backfat and kidney fat at similar amounts of double bonds in **feed** (Exp. 1:7% pork fat - PF, 4.95% olive oil - OO, 3.17% soybean oil - SO) or a constant amount of 5% of processed fats (Exp. 2: partially **hydrogenated fat** - SAT, fractionated pork fats: olein - OLE, stearin - STE). Compared with the control, PUFA were only slightly increased in backfat of **pigs** fed PF, OLE, STE or OO, although dietary PUFA intake was up to 70% higher. With SO PUFA were significantly increased in adipose tissues, predominantly at the expense of MUFA. Consequently, a non-linear relationship was found between PUFA intake and proportion in backfat. MUFA were incorporated at the expense of SFA, therefore, adipose tissues of OO fed animals were lowest in SFA. Despite comparable amounts of double bonds in **feed** (Exp. 1), the degree of unsaturation measured as fat score (sum of double bonds) was in the order SO > OO > PF > C. In contrast, the proportion of SFA was C > PF=SO > OO. Regarding the decisive role of SFA for fat consistency it may be concluded that MUFA should also be considered in **feeding** recommendations for **pigs**. Furthermore, in case of a high dietary supply of MUFA, a simple index of double bonds might not be sufficiently conclusive to judge **pig** fat quality.

L3 ANSWER 6 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:643171 CAPLUS
DN 138:169302
TI Improving pork quality in lean genotype **swine**: effects of chemical hydrogenation of dietary fat and supplementation of conjugated linoleic acid
AU Gatlin, Lori Averette
CS North Carolina State Univ., Raleigh, NC, USA
SO (2001) 188 pp. Avail.: UMI, Order No. DA3027849
From: Diss. Abstr. Int., B 2002, 62(10), 4286
DT Dissertation
LA English
AB Unavailable

L3 ANSWER 7 OF 35 PROMT COPYRIGHT 2006 Gale Group on STN

AN 2001:154641 PROMT
TI letters.(Brief Article)(Letter to the Editor)
SO Grocer, (3 Feb 2001) Vol. 224, No. 7489, pp. 20.
ISSN: 0017-4351.
PB William Reed Ltd.
DT Newsletter
LA English
WC 942
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB Organics: common sense at work
THIS IS THE FULL TEXT: COPYRIGHT 2001 William Reed Ltd.

Subscription: 160.00 British pounds per year. Published weekly. Broadfield Park, Crawley, West Sussex RH11 9RT., United Kingdom

L3 ANSWER 8 OF 35 CABA COPYRIGHT 2006 CABI on STN
AN 2001:116739 CABA
DN 20013101460
TI Characterization of fat quality in **pigs**
EMBRAPA Suinos e Aves Documentos, 69
AU Glaser, K. R.; Scheeder, M. R. L.; Fischer, K.; Wenk, C.
CS Swiss Federal Institute of Technology Zurich, Institute of Animal Science, Nutrition Biology, CH-8092 Zurich, Switzerland.
SO Proceedings of the 1st International Virtual Conference on Pork Quality: welfare, transport, slaughter and consumer, Concordia, Brazil, 16 November - 16 December, 2000, (2001) pp. 109-120. 8 ref.
Publisher: Embrapa Suinos e Aves. Concordia
Price: Journal article; Conference paper .
Meeting Info.: Proceedings of the 1st International Virtual Conference on Pork Quality: welfare, transport, slaughter and consumer, Concordia, Brazil, 16 November - 16 December, 2000.
CY Brazil
DT Journal
LA English
ED Entered STN: 1 Nov 2001
Last Updated on STN: 1 Nov 2001
AB Two **feeding** experiments were carried out to study the effects of: (1) monoenoic and polyenoic fatty acids, having similar numbers of double bonds, in **feed** (7% **pig** fat/4.95% olive oil/3.17% soyabean oil), and (2) fractionated **pig** fat (olein/stearin) or partially hydrogenated plant oil (satura) of an equal amount of supplementation (5%). The fat score (a fat quality measure established at Swiss slaughterplants), oxidative stability, consistency and crystallization time were recorded. Generally, there were significant treatment effects on fatty acid composition of adipose tissue, which were well reflected in the other fat quality traits. Olive and soyabean oil led to the highest fat scores and severely impaired consistency, whereas lowest scores and high firmness were measured for the **hydrogenated fat**. Only slight differences in fatty acid composition and fat quality were found for the **pig** fat treatments. There was a close non-linear relationship between the fat score and the consistency in extracted lipids (R2=0.78). The time needed for crystallization (RIC-Box) was moderately related to penetration force at 0[deg]C (R2=0.62). Crystallization appeared to be more dependent on the total amount of unsaturated fatty acids (R2 0.80) than on the amount of double bonds. Oxidative stability, measured as induction time, was significantly decreased at high amounts of PUFA in **feed** (SO) and tended to increase with olive oil supplementation. Thus, the correlation between fat score and induction time was only moderate (R2=0.36). It can be assumed that apart from fatty acid composition, oxidative stability is, to a great extent, dependent on anti- and prooxidative factors. These findings suggest that the fat score gives a useful estimate of adipose tissue consistency, which is, in turn, of great importance for processing and subsequent quality of meat products.

L3 ANSWER 9 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 4
AN 2000:859539 CAPLUS
DN 134:70873
TI Dietary C18:1 trans fatty acids increase conjugated linoleic acid in adipose tissue of **pigs**
AU Glaser, Karola R.; Scheeder, Martin R. L.; Wenk, Caspar
CS Institute of Animal Science, Nutrition Biology, Federal Institute of Technology, Zurich, Switz.
SO European Journal of Lipid Science and Technology (2000), 102(11), 684-686
CODEN: EJLTFM; ISSN: 1438-7697
PB Wiley-VCH Verlag GmbH
DT Journal

LA English
AB The effect of dietary C18:1 trans fatty acids on back fat composition in **pigs** was investigated with special emphasis on conjugated linoleic acids (CLA). A total of 12 + 4 siblings of Large White and Swiss Landrace breed were housed in groups and fattened from 22 to 103 kg live weight **Pigs** were fed a control diet (barley, wheat, soybean meal) or exptl. diets which consisted of the control diet with a 5% replacement of olein or stearin fractions of pork fat, or partially **hydrogenated fat**. The **hydrogenated fat** was rich in C18:1 trans fatty acids but contained only negligible amts. of CLA. In contrast olein and stearin fractions contained far less C18:1 trans fatty acids but some CLA. In the control diet no C18:1 trans fatty acids and only traces of CLA were detected. The partially **hydrogenated fat** led to the highest CLA content in back fat (0.44%). Intermediate amts. of CLA were measured in **pigs** fed the fractionated pork fat (0.22/0.23%). In **pigs** fed the control diet, also small amts. of CLA were detected. The results indicate that CLA may be produced by endogenous Δ9-desatn. out of dietary trans vaccenic acid in **pigs**.
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 10 OF 35 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN DUPLICATE 5
AN 2000:530997 BIOSIS
DN PREV200000530997
TI Influence of different fats in **pig feed** on fatty acid composition of phospholipids and physical meat quality characteristics.
AU Scheeder, Martin R. L. [Reprint author]; Glaser, Karola R.; Eichenberger, Barbara; Wenk, Caspar
CS ETH Zentrum / LFW, CH-8092, Zurich: martin.scheeder@inw.agrl.ethz.ch, Switzerland
SO European Journal of Lipid Science and Technology, (June, 2000) Vol. 102, No. 6, pp. 391-401. print.
ISSN: 1438-7697.
DT Article
LA English
ED Entered STN: 13 Dec 2000
Last Updated on STN: 11 Jan 2002
AB Two **feeding** experiments (i, ii) were conducted to investigate the influence of different dietary fats on the fatty acid (FA) composition of phospholipids as well as meat quality in **pigs**. In each experiment 12 X 4 siblings of Swiss Landrace or Large White breed were allocated to one of four **feeding** treatments according to sex, breed, and litter and fattened from about 25 to 105 kg liveweight. **Pigs** were fed a control diet (barley, wheat, soybean meal) or the control diet supplemented with 7% pork fat, 4.95% olive oil or 3.17% soybean oil (i) or 5% of olein or stearin fraction of pork fat or **hydrogenated fat** (ii). The dietary FA composition was reflected in the FA composition of phospholipids in M. long. dorsi and triceps brachii. However, the unsaturated to saturated ratio was not affected by the dietary intake of polyunsaturated FAs and was only slightly increased by the olive oil supplementation. Trans FAs including conjugated linoleic acid were incorporated into phospholipids only to a small extent. The dietary altered fatty acid composition of phospholipids did not cause any effect on pH, cooking loss, texture, or colour of pork, but meat quality as well as the proportion of saturated FA, arachidonic acid, and n-3 fatty acids were significantly influenced by genetic effects.

L3 ANSWER 11 OF 35 CABA COPYRIGHT 2006 CABI on STN DUPLICATE 6
AN 2000:100590 CABA
DN 20000107832

TI Fat score, an index value for fat quality in **pigs** - its ability to predict properties of backfat differing in fatty acid composition

AU Glaser, K. R.; Scheeder, M. R. L.; Wenk, C.; Wenk, C. [EDITOR]; Fernandez. A. [EDITOR]; Dupuis, M. [EDITOR]

CS Swiss Federal Institute of Technology (ETH) Zurich, Institute of Animal Science, Nutrition Biology, CH-8092 Zurich, Switzerland.

SO Quality of meat and fat in pigs as affected by genetics and nutrition. Proceedings of the joint session of the EAAP commissions on pig production, animal genetics and animal nutrition, Zurich, Switzerland, 25 August 1999, (2000) pp. 203-206. 6 ref.
Publisher: Wageningen Pers. Wageningen
Meeting Info.: Quality of meat and fat in pigs as affected by genetics and nutrition. Proceedings of the joint session of the EAAP commissions on pig production, animal genetics and animal nutrition, Zurich, Switzerland, 25 August 1999.
ISBN: 90-74134-74-2

CY Netherlands Antilles

DT Conference Article

LA English

ED Entered STN: 13 Sep 2000
Last Updated on STN: 13 Sep 2000

AB Fat score, a semi-automated determination of double bonds in adipose tissue, is an established method in Swiss slaughterhouses to assess backfat quality in **pigs**. Since body fat composition is directly influenced by dietary fat, two **feeding** trials were conducted. In the first trial, the effects of monoenoic or polyenoic fatty acids with a similar number of double bonds per kg **feedstuff** (70, 49.5, 31.7 g/kg lard, olive oil and soyabean oil) on fat score, consistency and oxidative stability were studied. In a second trial, the effects of the olein and stearin fraction of lard and **hydrogenated fat** (50 g/kg) were investigated. Olive and soyabean oil impaired fat score and firmness of adipose tissue to a greater extent than lard-supplemented **feed**. In contrast, the best oxidative stability was measured in fat from **pigs** fed olive oil. The **hydrogenated fat** resulted in lower fat scores and higher firmness. Compared to the stearin fraction, the olein fraction led to slightly higher fat scores, softer consistency and reduced oxidative stability, but without reaching statistical significance. Significant correlations were found between fat score and consistency and oxidative stability. It may be concluded that fat score gives a useful slaughter-line estimate of firmness of **pig** adipose tissue.

L3 ANSWER 12 OF 35 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN DUPLICATE 7

AN 1998:231953 BIOSIS

DN PREV199800231953

TI Backfat fatty acid evolution in **swine** fed diets high in either cis-monounsaturated, trans, or (n-3) fats.

AU Fontanillas, R.; Barroeta, A. [Reprint author]; Baucells, M. D.; Gaurdiola, F.

CS U.S. Nutricio Alimentacio Animal, Fac. Vet., UAB, E-08193 Bellaterra, Spain

SO Journal of Animal Science, (April, 1998) Vol. 76, No. 4, pp. 1045-1055. print.
CODEN: JANSAG. ISSN: 0021-8812.

DT Article

LA English

ED Entered STN: 20 May 1998
Last Updated on STN: 20 May 1998

AB To evaluate the effects of dietary fats on the evolution of the fatty acid profile of **swine** backfat, 30 castrated Landrace x Duroc **pigs** averaging 26 kg were assigned three diets with 4% added pomace oil (O), **hydrogenated fat** (H), or linseed oil

(L). Subcutaneous fat samples were taken from biopsies at 0, 17, 31, and 60 d, and at 24 h postmortem when **pigs** averaged 95 kg live weight at 82 d on trial. On d 17, saturated fatty acid (SFA) content was 2% lower for the 0 diet than for H and L ($P < .089$). There was a linear increase in SFA at a monthly rate of 2% in the three diets. The increase was mainly due to 18:0; palmitic acid percentages showed no variation. **Pigs** fed the 0 diet experienced exponential increases in monounsaturated fatty acids (MUFA), especially until d 17 ($P < .001$). In **pigs** fed the H or L diets, MUFA contents decreased at a monthly rate of 2.40%, and the same happened with oleic acid contents. Diets rich in (n-3) (L) and trans-fatty acids (H) caused exponential increases in **swine** backfat contents of total (n-3) and total trans, respectively. At d 31 ($P < .001$), 72 to 73% of the maximum contents had been reached. Contents for 20:3(n-3), 20:5(n-3), and 22:5(n-3) follow a pattern similar to that of their precursor 18:3(n-3), showing an exponential increase in **pigs** fed the L diet, and contents for H and 0 treatments were lower ($P < .001$). The three diets caused a linear decrease in (n-6) fatty acid contents throughout the 82-d trial.

L3 ANSWER 13 OF 35 CABA COPYRIGHT 2006 CABI on STN
AN 96:113082 CABA
DN 19961406658
TI Use of **hydrogenated fats** in the **feeding** of heavy **pigs**
L'impiego dei grassi idrogenati nell'alimentazione del suino pesante
AU Piva, G.; Morlacchini, M.; Prandini, A.; Cerioli, C.; Fusari, A.
CS Istituto di Scienze degli Alimenti e della Nutrizione, Facolta di Agraria, Universita Cattolica Sacro Cuore, Piacenza, Italy.
SO Rivista di Suinicoltura, (1996) Vol. 37, No. 4, pp. 157-164. 28 ref.
ISSN: 0035-662X
DT Journal
LA Italian
SL English
ED Entered STN: 13 Sep 1996
Last Updated on STN: 13 Sep 1996
AB Duroc x (Large White x Landrace) female and castrated male **pigs**, in 3 groups of 18, were given diets based on maize bran and maize, barley, soyabean and fish meals without (TA) or with 3% **hydrogenated fats** (HF) from 60 kg (TB) or from 120 kg (TC) liveweight until slaughter at 160 kg. Mean daily gain, **feed** conversion efficiency and dressing percentage did not differ among treatments. Backfat thickness was 23.3 and 22.9% lower for treatment TB than for TA and TC, respectively. Fat firmness was 15.5% greater for TC than TA ($P<0.05$). Myristic acid content of the inner layer of fat in the leg was greater with TB and TC diets than with TA ($P<0.05$). In the outer layer C18:2 was lower for TB and TC than for TA ($P<0.05$). Intramuscular fat composition of cured ham (12 months) showed a lower content of C18:2 ($P<0.01$) and a higher content of C20:4 ($P<0.01$) for TB than for TA. Total saturated fatty acids increased by about 9.9% with HF. Proteins, globulin, urea, cholesterol, bilirubin, alanine aminotransferase, magnesium, potassium and [beta]-lipoprotein in plasma were significantly greater in HF than in controls. Results indicate that HF improved maturation and quality of hams, decreasing the linoleic acid content of mature hams.

L3 ANSWER 14 OF 35 FSTA COPYRIGHT 2006 IFIS on STN
AN 1994(10):S0063 FSTA
TI Nutrition and fat quality in the heavy **pig**.
AU Mordenti, A.; Piva, G.; Casa, G. della
CS Istituto di Zootecnia e Nutr. Animale, Univ. di Bologna, 40064 Ozzano Emilia, Italy
SO Italian Journal of Food Science, (1994), 6 (2) 141-155, 42 ref.
DT General Review
LA English

SL Italian
AB For production of Italian seasoned raw ham (e.g. Parma ham), a higher standard of fat quality is required than for other pork products. In order to produce a high quality raw ham product, the fresh upper hind legs should be covered with a fat layer of reasonable thickness and high quality. Modification of the fatty acids composition of **swine** adipose tissues using dietary factors is reviewed. Aspects considered include: dietary factors influencing fatty acid composition (energy intake, biotin and copper, dietary fatty acids); dietary manipulations of the fatty acid composition (use of low cost dietary fat during the growing period of the animals and high quality fat during the finishing period, use of partially or fully **hydrogenated fats**, use of substances able to reduce desaturation of dietary or de novo synthesized C18:0); and fat quality evaluation (GLC, surface fat autoxidation, objective colour methods).

L3 ANSWER 15 OF 35 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN DUPLICATE 8
AN 1994:73972 BIOSIS
DN PREV199497086972
TI Animal experimental studies on ultrastructural changes of ileal lamina propria through dietary fats and comparison with the cytopathology in Crohn's disease.
AU Nagel, E. [Reprint author]; Schattenfroh, S.; Buehner, S.; Bartels, M.; Guthy, E.; Pichlmayr, R.
CS Klinik Abdominal- Transplantationschirurgie, Med. Hochschule Hannover, Postfach 61 01 80, D-30625 Hannover, Germany
SO Zeitschrift fuer Gastroenterologie, (1993) Vol. 31, No. 12, pp. 727-734. CODEN: ZGASAX. ISSN: 0044-2771.
DT Article
LA German
ED Entered STN: 22 Feb 1994
Last Updated on STN: 22 Feb 1994
AB Experimental investigations have shown alterations of the ileal mucosal surface after specific fat diets resembling early changes in Crohn's disease. An animal experiment in **pigs** has been conducted. After creation of an anisoperistaltic segment these were fed either a specific fat diet containing chemically processed, partially **hydrogenated fats** or a low fat control diet over a period of 3 months. Defined areas of the ileal lamina propria were examined by transmission electron microscopy with the underlying question to what extent ultrastructural alterations could be compared to Crohn's disease. In comparison to the control group these areas were characterized by a dense infiltration of "inflammatory", cells like lymphocytes, histiocytes, macrophages and plasma cells indicating a hyperplasia and activation of lympho-plasmocytotic cells. Additionally, a focal prominent infiltration of mast cells with degranulation was observed as well as a dilatation of axons with depletion of axonal organelles in half of the animals after fat-**feeding**. Compared to patients with Crohn's disease the results show obvious similarities. It is concluded, that chemically processed fats could cause direct stimulation of immunologically-specific and non-specific cells in the lamina propria mucosae or directly injure the intestinal mucosa with secondary infiltration of inflammatory cells into the lamina propria.

L3 ANSWER 16 OF 35 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN DUPLICATE 9
AN 1992:408207 BIOSIS
DN PREV199294071407; BA94:71407
TI EXPERIMENTAL DAMAGE OF THE ILEAL EPITHELIAL-CELL-LAYER BY DIETARY FAT TRANSMISSION ELECTRON MICROSCOPIC FINDINGS AND THEIR COMPARISON TO THE CELL PATHOLOGY OF CROHN'S DISEASE.
AU NAGEL E [Reprint author]; SCHATTENFROH S; BUEHNER S; BARTELS M; GUTHY E;

PICHLMAYR R
CS KLINIK ABDOMINAL TRANSPLANTATIONSCHRURGIE, MED HOCHSCHULE HANNOVER, POSTFACH 61 01 80, W-3000 HANNOVER 61/BUNDESREPUBLIK DEUTSCHLAND
SO Zeitschrift fuer Gastroenterologie, (1992) Vol. 30, No. 6, pp. 403-410. CODEN: ZGASAX. ISSN: 0044-2771.
DT Article
FS BA
LA GERMAN
ED Entered STN: 9 Sep 1992
Last Updated on STN: 9 Sep 1992
AB Regarding the unknown pathogenesis of Crohn's disease repeatedly the importance of diet has been accentuated. Epidemiological, biochemical and animal experimental results have focused on a possible relationship between the consumption of chemically processed, partial **hydrogenated fats** and the development of regional enteritis. In this context an experimental animal model in **pigs** was designed to analyzed, whether transmission electron microscopic alterations of ileal mucosa could be induced by forage of chemically processed fats. By creation of a retroperistaltic ileal segment the contact time between chyme and intestinal mucosa was prolonged. Our underlying question was to what extent disorders of the intestinal barrier function could be compared to Crohn's disease. Present study concentrates on the epithelial-cell-layer. It was shown that in comparison to the control animals the lamina epithelials mucosae of all animals after fat-**feeding** was characterized by: -sublethal lesion of the enterocytes/crypt-epithelial cells (shortening and alteration of the microvilli, degeneration of mitochondria, formation of autophagocytic vacuoles); -globlet cell hyperplasia and increased production of mucus; -focus appearance of intraepithelial lymphocytes as well as presence of polymorphonuclear granulocytes in the epithelium; -widening of the intercellular-space locally up to total loss of the functional structure of the epithelial-cell-layer. In total the picture can be evaluated as an inflammatory process of the ileal mucosa. It can be concluded, that chemically processed fats as used in the described experimental conditions could induce this process. The feature of mucosal damage shows obvious similarities to ultrastructural findings in Crohn's disease if compared.

L3 ANSWER 17 OF 35 PROMT COPYRIGHT 2006 Gale Group on STN

AN 90:496211 PROMT
TI The pros and cons: polyunsaturated and monounsaturated fats.
AU Sanders, Tom
SO Chemistry and Industry, (2 Jul 1990) No. 13, pp. 427(3). ISSN: ISSN: 0009-3068.
PB Society of Chemical Industry
DT Newsletter
LA English
WC 2940
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB Does a healthy heart have an appetite for fish oil? Or should we take an aspirin tablet every day? The relationship between risk of coronary heart disease, lipoprotein levels and dietary intake of saturated fats is complex. Here, the author reviews recent epidemiological and metabolism studies, looks at dietary alternatives to saturated fat, and sorts out the evidence behind doctor's orders'.

L3 ANSWER 18 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1988:527808 CAPLUS
DN 109:127808
TI Trans fatty acids. 2. Fatty acid composition of the brain and other organs in the mature female **pig**
AU Pettersen, Jan; Opstvedt, Johannes
CS Norw. Herring Oil Res. Inst., Fyllingsdalen, N-5033, Norway

SO Lipids (1988), 23(7), 720-6
CODEN: LPDSAP; ISSN: 0024-4201
DT Journal
LA English
AB Female **pigs** were fed from 3 wk of age and up to 2 yr a diet containing partially hydrogenated fish oil (PHFO, 28% trans monoenoic fatty acids), partially hydrogenated soybean oils (PHSBO, 36% trans fatty acids) or lard. No consistent differences were found between PHFO and PHSBO with regard to incorporation of trans fatty acids in organ lipids, but trans incorporations were highly organ-specific. No trans fatty acids were detected in brain phosphatidylethanolamine (PE). The incorporation of monoenoic trans isomers, as a percentage of total cis + trans, in other organs was highest in s.c. adipose tissue and liver mitochondria PE, followed by blood lipids with the lowest level in heart PE. The percentage of trans isomers compared with that of dietary lipids was consistently lower for 20:1, compared with 18:1 in organs from PHFO-fed **pigs**. The only effect of dietary trans fatty acids on the fatty acid pattern of brain PE was an increased level of 22:5n-6. Heart PE and total serum lipids of **pigs** fed the **hydrogenated fats** contained higher levels of 18:2n-6, and these lipids of the PHFO-fed group also contained slightly elevated amts. of 20:3n-6, 18:3n-3 and 20:5n-3. Liver mitochondria PE of the PHFO group also contained higher levels of 20:3n-6 and 22:5n-6. Dietary trans fatty acids caused a consistent decrease of saturated fatty acids compensated by increased levels of monoenes. Thus, dietary long-chain trans fatty acids in PHFO behaved similarly metabolically to 18:1-trans in PHSBO in **pigs**, without noticeable influence on brain PE composition and with moderate to slight effects on the fatty acid profile of the other organs.

L3 ANSWER 19 OF 35 CABA COPYRIGHT 2006 CABI on STN
AN 86:90633 CABA
DN 19861486628
TI The effect of a high level of vitamin E and of a ration with hydrogenated free fatty acids upon pork quality
AU Astrup, H. N.; Langebrekke, A.
CS Inst. Husdyrnaering, As-NLH, Norway.
SO Meldinger fra Norges Landbruksh<o>gskole, (1985) Vol. 64, No. 21, pp. 6. 19 ref.
DT Miscellaneous
LA English
SL Norwegian
ED Entered STN: 1 Nov 1994
Last Updated on STN: 1 Nov 1994

L3 ANSWER 20 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1985:436591 CAPLUS
DN 103:36591
TI Comparative study of the atherogenicity of dietary trans, saturated and unsaturated fatty acids on **swine** coronary arteries
AU Toda, Takayoshi; Toda, Yumiko; Yamamoto, Virginia K.; Kummerow, Fred A.
CS Dep. Food Sci., Kyoto Women's Univ., Kyoto, 605, Japan
SO Journal of Nutritional Science and Vitaminology (1985), 31(2), 233-41
CODEN: JNSVA5; ISSN: 0301-4800
DT Journal
LA English
AB Three groups of 2-mo-old **swine** were fed on basal diets supplemented with either oleic acid-rich safflower oil, lard, or hydrogenated soybean oil in order to monitor the atherogenicity of various dietary fatty acids. The level of plasma triglyceride was highest in the safflower oil group and the level of plasma cholesterol was highest in the lard group. The degree of intimal thickening of the coronary arteries was most severe in the safflower oil group and least severe in the **hydrogenated fat** group. Both the lard- and safflower

oil-supplemented groups displayed lipid-rich coronary arterial lesions. The thickened intima of these 2 groups contained numerous activated smooth muscle cells, degenerated cells with or without stainable lipid, and abundant cell debris. Cellular changes were less conspicuous in the coronary arteries from the **hydrogenated fat** group than in those from the other 2 groups.

L3 ANSWER 21 OF 35 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2006) on STN
AN 86:85193 AGRICOLA
DN IND86063069
TI The effect of a high level of vitamin E and of a ration with hydrogenated free fatty acids upon pork quality.
AU Astrup, H.N.; Langebrekke, A.
AV DNAL (104 N762M)
SO Meldinger fra Norges landbrukshogskole = Scientific reports of the Agricultural University of Norway, 1985. Vol. 64, No. 21. 6 p
Publisher: As : Det Universitet.
CODEN: MNLHAT; ISSN: 0025-8946
NTE Includes references.
DT Article
FS Non-U.S. Imprint other than FAO
LA English
SL Norwegian

L3 ANSWER 22 OF 35 FSTA COPYRIGHT 2006 IFIS on STN
AN 1986(09):S0070 FSTA
TI The effect of a high level of vitamin E and of a ration with hydrogenated free fatty acids upon pork quality.
AU Astrup, H. N.; Langebrekke, A.
CS Dep. of Anim. Nutr., Agric. Univ. of Norway, 1432 As-NLH, Norway
SO Meldinger fra Norges Landbrukshogskole, (1985), 64 (21) 6pp., 19 ref.
DT Journal
LA English
SL Norwegian
AB 16 **pigs** were used in a **feeding** trial in which diets with or without addition of vitamin E (10 g/day), containing 40 g fat or free fatty acids/day (hydrogenated products derived from herring oil) were administered. Effects on carcass quality and meat quality (including sensory quality) were evaluated. Carcass quality characteristics were little affected by the treatments studied. The vitamin E supplement caused an off-flavour in the meat. **Feeding** hydrogenated fatty acids rather than **hydrogenated fat** adversely affected the subjective consistency value of the meat.

L3 ANSWER 23 OF 35 CABA COPYRIGHT 2006 CABI on STN DUPLICATE 10
AN 84:79602 CABA
DN 19841457411
TI The influence of dietary isomeric and saturated fatty acids on atherosclerosis and eicosanoid synthesis in **swine**
AU Royce, S. M.; Holmes, R. P.; Takagi, T.; Kummerow, F. A.
CS Univ. Illinois, 1208 W Pennsylvania Ave., Urbana, IL 61801, USA.
SO American Journal of Clinical Nutrition, (1984) Vol. 39, No. 2, pp. 215-222. 38 ref.
ISSN: 0002-9165
DT Journal
LA English
ED Entered STN: 1 Nov 1994
Last Updated on STN: 1 Nov 1994
AB Weanling **pigs** were fed for 6 months on high-fat diets containing as fat source a high oleic acid safflower oil, lard or a partly

hydrogenated soya bean oil blended with soya bean oil. The extent of atherosclerosis in left coronary arteries and the ability of vascular components to synthesize eicosanoids important for blood clotting were determined. There was no significant difference in the extent of atherosclerosis or the synthesis of thromboxane A2. Significant effects were observed on serum cholesterol, which was increased in the group fed on lard, serum triacylglycerol, which was highest in the safflower oil group, and prostacyclin synthesis, which was depressed by the lard and hydrogenated soya bean oil diets compared with the safflower oil diet.

L3 ANSWER 24 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1986:19005 CAPLUS
DN 104:19005
TI The distribution of trans-isomeric fatty acids in organ lipids from mother sows and their offspring after **feeding** with partially **hydrogenated fats**
AU Pettersen, Jan
CS Norw. Herring Oil Meal Ind. Res. Inst., Fyllingsdalen, N-5033, Norway
SO Proc. - Scand. Symp. Lipids, 12th (1984), Meeting Date 1983, 94-104. Editor(s): Marcuse, Reinhard. Publisher: LIPIDFORUM, Goeteborg, Swed. CODEN: 54QGAL
DT Conference
LA English
AB Sows fed diets containing partially hydrogenated soybean oil or partially hydrogenated fish oil showed the same total trans-acids in their milk and adipose tissue as in their diets. However, those receiving the fish oil showed increased amts. of trans-octadecenoic acids in the milk and adipose tissue over the amts. in the diet. Unlike other organs tested, the brain showed no increase in trans-acids in response to dietary trans-acids. This was also true of the adipose tissue of neonatal piglets, but in 3-wk-old suckling piglets adipose trans-acids were similar in amount to those of the sow milk. In liver mitochondria and heart lipids the trans-acids were 40-60% their proportion in dietary lipids.

L3 ANSWER 25 OF 35 FSTA COPYRIGHT 2006 IFIS on STN
AN 1984(07):S1465 FSTA
TI [**Feeding** value of a concentrate of calcium salts of fatty acids.]
AU Zhadan, A. M.; Ibatullin, I. I.; Vagonene, E. M.; Kaugers, R. E.; Erte, A. A.; Kyaune, K. Ya.; Krylov, V. M.; Toichkina, A. V.; Mil'ner, M. L.; Lyutinskii, S. I.; Kozlova, V. L.; Fedonyuk, V. M.; Sergeev, N. I.; Zamyshlyaeva, A. M.; Volkova, Z. D.
CS Ukraiiskaya Sel'skokhoz, Akad., Kiev, USSR
SO Vestnik Sel'skokhozyaistvennoi Nauki, Moscow, USSR, (1983), No. 9, 78-82, 10 ref.
DT Journal
LA Russian
SL English
AB A new USSR **feed** product consists of a concentrate of Ca salts of fatty acids obtained in purification of soap-containing rinsing waters arising in manufacture of **hydrogenated fats** and edible vegetable oils. It contains ≥45% total fat (90% on DM basis), including 50-90% Ca salts of fatty acids and ≤50% moisture and volatile substances. This article presents results of tests with the product used in broiler rations as maize replacer and also as substitute for sunflower-seed oil, carried out in 6 USSR research institutes. It is concluded from tabulated data on broiler meat composition and production that the concentrate is fully suitable for use as a broiler ration component. In tests with **pigs**, inclusion of the concentrate in the ration softened backfat consistency and adversely affected taste of the meat.

L3 ANSWER 26 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1979:202629 CAPLUS
DN 90:202629
TI Hydrogenated marine fat with a high content of free fatty acids in **feed** mixtures for growing-finishing **pigs**
AU Gjefsen, Torger; Lysoe, Arvid
CS Norw. Herring Oil Meal Ind. Res. Inst., Bergen, Norway
SO Acta Agriculturae Scandinavica (1979), 29(1), 65-70
CODEN: AASCAU; ISSN: 0001-5121
DT Journal
LA English
AB **Pigs** fed barley-based mixed **feeds** containing 4% hydrogenated (to m.p. 38-40°) marine fat containing 8% free fatty acids, 8% of the same fat, or 8% of a similar hydrogenated marine fat containing ≤1% free fatty acids had higher weight gains (651.8-673.4 g/day) than controls (629.2 and 638.6) given the standard **feed** without fat supplements. Meat quality was not significantly affected by the fat supplements.

L3 ANSWER 27 OF 35 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN DUPLICATE 11
AN 1979:201934 BIOSIS
DN PREV197968004438; BA68:4438
TI NUTRITION IMBALANCE AND ANGIO TOXINS AS DIETARY RISK FACTORS IN CORONARY HEART DISEASE.
AU KUMMEROW F A [Reprint author]
CS BURSIDES RES LAB, UNIV ILL, URBANA-CHAMPAIGN, ILL, USA
SO American Journal of Clinical Nutrition, (1979) Vol. 32, No. 1, pp. 58-83.
CODEN: AJCNAC. ISSN: 0002-9165.
DT Article
FS BA
LA ENGLISH
AB Imbalancing nutritionally adequate diets with an excessive amount of fat calories and cholesterol has obscured the fact that intimal thickening occurs spontaneously in time on low-fat cholesterol-free diets during the aging process, and that intimal thickening can be accelerated by dietary angiotoxic risk factors. EM of arterial tissue from animal models identified degenerated smooth muscle cells in the fetus from sows kept on low-fat cholesterol-free diets. After birth, the degenerated smooth muscle cells increased in number with age. The presence of angiotoxic risk factors such as oxidized cholesterol and vitamin D3 (cholecalciferol) in the diet of such animal models increased the frequency of smooth muscle cell death in their arteries. Two types of pathology could be developed in the thoracic aorta by continuous or short term **feeding** of 12.5 + more vitamin D than normally present in commercial rations: a diffuse fibroelastic intimal thickening in the thoracic aorta (arteriosclerosis) with no evidence of lipid deposition by continuous **feeding** of vitamin D or an intimal thickening in the thoracic aorta and intimal thickening with foam cells and extracellular lipid deposits (atherosclerosis) in the coronary arteries after a short period of supplemental vitamin D followed by 3-4 mo. of supplement-free diets. These 2 types of arterial damage were identical to that in the plugs of human thoracic aorta obtained as a by-product of elective coronary bypass surgery. Although all of the possible sources of oxidized cholesterol in the diet were not yet identified, laboratory studies identified oxidized cholesterol as an angiotoxic factor. Since population groups that consume less vitamin D-supplemented foods, less deep fat fried cholesterol-containing foods, and less **hydrogenated fats** have a lower incidence of coronary heart disease than Americans, it seems judicious for food processors to reduce these previously unconsidered risk factors to a minimum. This could be done by eliminating vitamin D2 and D3 from all vitamin supplements, from all food and cereal products and from the diet of livestock 1 mo. before they were killed so that the intake of vitamin D is no larger than the 400 IU/quart in milk which is necessary to

prevent rickets in children. Deep fat fryers, which are kept at almost 200° C for 24 h/day, could perhaps be replaced with microwave ovens in fast food chain outlets. Processors could hydrogenate vegetable oils to a minimum trans fatty acid content and rearrange this fat with polyunsaturated fats to produce high polyunsaturated fasts trans-free margarines and shortenings.

L3 ANSWER 28 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1978:49346 CAPLUS
DN 88:49346
TI The influence of vitamin D on plasma and tissue lipids and atherosclerosis in **swine**
AU Huang, William Y.; Kamio, Akinori; Yeh, S. J. C.; Kummerow, Fred A.
CS Burnsides Res. Lab., Univ. Illinois, Urbana, IL, USA
SO Artery (Fulton, MI, United States) (1977), 3(5), 439-55
CODEN: ARTEDR; ISSN: 0098-6127
DT Journal
LA English
AB Weanling **pigs** were fed a mineral and vitamin supplemented basal diet of yellow corn and soybean meal or the basal diet plus vitamin D3 [67-97-0], or beef tallow, butterfat, or **hydrogenated fat** plus vitamin D3. The plasma cholesterol [57-88-5] and triglyceride values were significantly higher in **pigs** fed the diets supplemented with fat plus vitamin D3 than in those fed the basal diet or the basal diet plus vitamin D3. The total cholesterol content of the plasma was highest in **pigs** fed **hydrogenated fat** plus vitamin D3. Tissue lipid contents were quite stable; however, total hepatic and aortic cholesterol values were significantly increased in **pigs** fed fat plus vitamin D3. The phospholipid content was significantly higher in aortic tissue of **pigs** fed the fat-supplemented diets plus vitamin D3 than in those fed only the basal diet. The thoracic and abdominal aorta of the **pigs** fed fat plus vitamin D3 had a relatively higher amount of involvement of atherosclerosis.

L3 ANSWER 29 OF 35 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
AN 1977:181619 BIOSIS
DN PREV197764003983; BA64:3983
TI INFLUENCE OF DIETARY TRANS FATTY-ACIDS ON **SWINE** LIPO PROTEIN COMPOSITION AND STRUCTURE.
AU JACKSON R L; MORRISETT J D; POWNALL H J; GOTTO A M JR; KAMIO A; IMAI H; TRACY R; KUMMEROW F A
SO Journal of Lipid Research, (1977) Vol. 18, No. 2, pp. 182-190.
CODEN: JLPRAW. ISSN: 0022-2275.
DT Article
FS BA
LA Unavailable
AB Four groups of 20 weanling **swine** each were fed either basal diet, basal plus **hydrogenated fat** (13% trans), basal plus **hydrogenated fat** (13% trans) and 0.4% cholesterol or basal plus beef tallow (all cis). After 6 mo. of **feeding**, the animals were killed and the blood and aortas were removed. Very low density, low density and high density lipoproteins were then isolated from the plasma by ultracentrifugal flotation. Although the fatty acid composition of the basal diet was different from the diets supplemented with either **hydrogenated fat** containing trans-fatty acid or beef tallow containing all cis, the lipid and fatty acid compositions of each of the isolated lipoprotein classes for the 4 groups of animals were remarkably similar. Elaidate was clearly incorporated into the lipoproteins of animals fed **hydrogenated fat**, but the level of incorporation was generally less than 5%. In a direct comparison of the structure of the lipoproteins from the different groups,

no significant differences were found in their physical properties as determined by pyrene fluorescence and EPR methods. Grossly visible fatty streaks and fibrous plaques were not found in any of the **swine** aorta. EM and light microscopy indicated the presence of atherosclerotic lesions in the distal abdominal aorta and bifurcation. A diet containing a substantial amount of trans-fatty acid can lead to a small but definite incorporation into the **swine** lipoproteins. Such changes had relatively little effect on lipoprotein structure or the presence of atherosclerotic lesions in these 6 mo. old **swine**.

L3 ANSWER 30 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 12
AN 1977:28754 CAPLUS
DN 86:28754
TI Comparison of corn oil versus partially hydrogenated soy oil on atherosclerosis
AU Lohman, T. G.; Romack, F. E.
CS Coll. Appl. Life Stud., Univ. Illinois, Urbana, IL, USA
SO World Soybean Res., Proc. World Soybean Res. Conf. (1976), Meeting Date 1975, 883-91. Editor(s): Hill, Lowell D. Publisher: Interstate Printers Publ., Inc., Danville, Ill.
CODEN: 34OOAD
DT Conference
LA English
AB Partially hydrogenated soybean oil and nonhydrogenated corn oil, fed with diets containing 5 and 15% protein were compared for their effect on coronary and aortic atherosclerosis. **Swine** were a useful model for the study of atherosclerosis because these early middle-aged animals (1.95 years old) developed considerable atherosclerosis in the abdominal aorta and left coronary artery without developing hypercholesterolemia through cholesterol **feeding**. The mean percent lesion area of the abdominal aorta of **swine** fed the **hydrogenated fat** was 38.9%, significantly greater than the 32.1% for those fed the nonhydrogenated fat. Similar results were found when the lipid from the lesion area of the abdominal intimal layer was used as an index. However, because of possible confounding genetic influence, not all of the differences between dietary treatments may be due to the consumption of **hydrogenated fat**. In contrast to the significant differences found in the abdominal aorta, no effects of dietary fat were found on the descending branch of the left coronary artery.

L3 ANSWER 31 OF 35 CABA COPYRIGHT 2006 CABI on STN DUPLICATE 13
AN 77:68203 CABA
DN 19761445821
TI Additive risk factors in atherosclerosis
AU Kummerow, F. A.; Cho, B. H. S.; Huang, W. Y. T.; Imai, H.; Kamio, A.; Deutsch, M. J.; Hooper, W. M.
CS Burnsides Research Lab., Univ. Illinois, Urbana, Ill. 61801, USA.
SO American Journal of Clinical Nutrition, (1976) Vol. 29, No. 5, pp. 579-584. 24 ref.
ISSN: 0002-9165
DT Journal
LA English
ED Entered STN: 1 Nov 1994
Last Updated on STN: 1 Nov 1994
AB Tissues of human subjects had a higher content of vitamin D than the tissues of 6-month-old **pigs** fed on a commercial ration containing 14 times more cholecalciferol than the US National Research Council's recommended allowance for growing **pigs**. Bioassays of commercial livestock **feeds** indicate much higher vitamin D contents than the NRC recommendation. High vitamin D activity is demonstrable in tissues from animals on such **feeds**. The grossly normal areas of the aorta of weanling **pigs** given cholecalciferol 100 000 IU/lb basal ration during the initial 6 weeks had a higher

frequency of degenerated smooth muscle cells than the grossly normal areas of aorta of **pigs** given the commercial ration, 7.43 plus or minus 0.45 and 5.60 plus or minus 0.27/100 cells, respectively, at age 3 months. Addition of **hydrogenated fat** 13 lb and cholesterol 200 g/100 lb commercial ration further increased the frequency of degenerated smooth muscle cells to 7.96 plus or minus 0.39/100 cells in the grossly normal areas of the aorta of weanling **pigs** fed on this fat-supplemented ration to 3 months of age.

L3 ANSWER 32 OF 35 CABA COPYRIGHT 2006 CABI on STN
AN 76:68990 CABA
DN 19751429350
TI Hydrogenated marine fat as **feed** supplement. 1. Digestibility of rations containing hydrogenated marine fat in **pigs**
AU Sundstoel, F.
SO Meldinger fra Norges Landbrukshoegskole, (1974) Vol. 53, No. 22, pp. 24.
DT Miscellaneous
LA English
SL Norwegian
ED Entered STN: 1 Nov 1994
Last Updated on STN: 1 Nov 1994
AB 1. Fat in **feeds** for **pigs** is discussed in a review of 51 papers. In 4 experiments 68 estimations were made of the digestibility of **hydrogenated fat** from capelin, herring and mackerel when given to **pigs**. Diets were given for 14 days, with collection for 7. In the first test a diet with 19.8% crude protein was given without addition or with 5, 10 or 15% fats with melting points (m.p.) 31 deg to 33 deg or 38 deg to 40 deg C. **Pigs** weighed 48 kg initially. Daily intakes of ether extract were between 50 and 260 g. Increasing fat increased digestibility of ether extract but had no effect on that of other components. Fat of higher melting point was less digestible and reduced digestibility of protein slightly. In the second experiment the same 2 fats were added at 4 or 8% of a barley-based diet and soya bean oilmeal was adjusted to keep energy:protein ratio constant. Samples were hydrolysed with HCl before ether extraction of fat; daily intakes of fat were from 60 to 160 g. Average weight of **pigs** increased from 47 to 77 kg during the experiment. Harder fat was less digestible. Increasing either fat reduced digestibility of all components of the diet except fat and crude protein, which increased with up to 4% fat. A similar basal diet was next given with or without 7% fat of m.p. 31 deg to 33 deg and with or without pyridoxine 0.5 g/100 kg to 4 **pigs** in 4 periods. Neither addition had any significant effect except that fat was more digestible in diets to which it was added. An almost fat-free semisynthetic diet was used to estimate metabolic faecal fat. The basal diet was of extracted herring meal 13, dried skimmed milk 12, potato starch 27.8, maize starch 25, sugar 15, oat husks and minerals plus vitamins 2.2%, and was given without addition or with 7% fat of m.p. 38 deg to 40 deg , 48 deg to 50 deg or 52 deg to 54 deg . Four **pigs** were used for 4 periods from 31 to 51 kg liveweight in a Latin square design. The basal diet provided 1 g and others 80 g fat daily. Fat of higher melting point gave declining digestibility of diet components and reduced apparent digestibility of fat estimated after HCl hydrolysis but not when estimated without hydrolysis. Comparison was then made between ether extractions before or after hydrolysis of samples with 3N HCl. Regardless of hardness of fat the 2 methods agreed well for **feed** mixtures but for faeces r = 0.29 in the first 3 experiments and there was no relation when more saturated fats were used in the fourth. Without preliminary hydrolysis ether extract greatly underestimated faecal fat.

L3 ANSWER 33 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1959:2671 CAPLUS
DN 53:2671

OREF 53:526e-g
TI Essential fatty acid deficiency its role in parakeratosis
AU Hanson, L. J.; Sorensen, D. K.; Kernkamp, H. C. H.
CS Univ. of Minnesota, St. Paul
SO American Journal of Veterinary Research (1958), 19, 921-30
CODEN: AJVRAH; ISSN: 0002-9645
DT Journal
LA Unavailable
AB In 2 laboratory trials, parakeratosis (I) was produced in normal, healthy, weaned **feeder pigs**. A deficiency of essential fatty acid was created by excessive levels of growth stimulants in a well-balanced **swine** ration. High levels of Ca were used in the ration in the 1st trial, and normal Ca levels in the 2nd trial, to decrease the digestibility of the fat in the ration. In several lots the basal ration was supplemented with a soybean oil preparation containing 54% linoleic acid. In the 2nd trial no skin lesions developed in the 5 normal **pigs** given this oil in the ration at a level of 23% by weight, while the 25 **pigs** in 5 other lots developed skin lesions associated with I. Included in the 2nd trial were 2 lots of **pigs** whose basal rations were supplemented with ZnSO4 at 200 p.p.m. and **hydrogenated fat** at 16% by weight In both lots, the **pigs** developed skin lesions quickly and extensively. When treating **pigs** affected with I, there was little difference in the results when the ration was supplemented with oil or Zn. When adding Zn to the ration of **swine** with I, the Ca level should be lowered to approx. 0.5 to 0.6%. Growth stimulants should be reduced and oats and corn should be included. 25 references.

L3 ANSWER 34 OF 35 FEDRIP COPYRIGHT 2006 NTIS on STN
AN 2006:111271 FEDRIP
NR AGRIC 0183415
TI n-3 and n-6 Fatty Acids in the Maternal and Infant Diet
SF Principal Investigator: (milk composition)
Craig-Schmidt, M. C.
CSP AUBURN UNIVERSITY, FOOD & NUTRITION, AUBURN, ALABAMA, 36849
FU HATCH |c H
FS Department of Agriculture
SUM 1. Identify and test sources of n-3 fatty acids appropriate for supplementation of infant and maternal diets. 2. Assess the maternal diet for factors influencing docosahexaenoic acid (DHA) and n-3/n-6 ratio of human milk. 3. Identify dietary factors which will exercise protective effects on the neonatal gastrointestinal tract. Objective 1. Lactating women approximately two months postpartum will be supplied with two docosahexaenoic(DHA)-enriched eggs per day for a one week period. Milk samples will be collected prior to supplementation, during supplementation and after supplementation. Milk will be extracted and analyzed for fatty acids, including DHA. Objective 2. Maternal diet of lactating women will be assessed by collection of duplicate portions, diet records and food frequency questionnaires. Milk samples will be collected on the day following dietary assessment and the complete fatty acid profile determined. Maternal dietary factors will be related to milk n-3 and n-6 fatty acid composition. Objective 3. Neonatal **pigs** will be used as a model for the human infant to investigate factors in human milk which promote mucosal cytoprotection by increasing prostaglandin E-2 production.PR the physiology of the infant. In particular, adequate amounts of the long chain fatty acid, docosahexaenoic acid (DHA, 22:6n-3) which is needed for neonatal neural development are dependent upon an adequate source of this fatty acid in the maternal diet. The effectiveness of using DHA-enriched eggs (150 mg of DHA/egg) as a source of n-3 fatty acids in the diet of lactating women was investigated. Lactating women (n=10) supplemented their usual diets with two DHA-enriched eggs per day for seven days. Samples of milk were collected immediately prior to supplementation, on days 4 and 7 during supplementation and on days 1 and

2 following supplementation. Breast milk DHA significantly increased from a baseline value of 0.19% of total fatty acids to 0.38% on day 4 and 0.48% on day 7 of supplementation. Milk DHA declined on day 1 postsupplementation to 0.32% and by day 2 postsupplementation, was no longer significantly different from baseline. Thus, supplementing the diet of lactating women with two DHA-enriched eggs per day is an effective means of increasing the DHA content of human milk, thereby providing additional DHA to the developing infant. A continuous supply of DHA-enriched eggs, however, is necessary to maintain elevated levels of DHA in the breast milk. Another essential fatty acid, arachidonic acid (ARA, 20:4n-6) in breast milk or in supplemented formula may help maintain the integrity of intestinal mucosa by increasing cytoprotective eicosanoids in the neonatal gut. Neither ARA nor DHA in the neonatal brain appeared to be severely affected by exposure of the dam to methylmercury during pregnancy and lactation. Trans-fatty acids found in commercially **hydrogenated fats** are transferred from the maternal diet into breast milk.PB

L3 ANSWER 35 OF 35 FEDRIP COPYRIGHT 2006 NTIS on STN
AN 2006:105854 FEDRIP
NR AGRIC 0172026
TI LIPID NUTRITION AND METABOLISM OF **SWINE**
SF Principal Investigator: (feed formulation)
Odle, J.
CSP NORTH CAROLINA STATE UNIV, ANIMAL SCIENCE, RALEIGH, NORTH CAROLINA, 27695
FU HATCH |c H
FS Department of Agriculture
SUM The broad objective of this research project is to improve the utilization of various triglycerides and fatty acids as a fuel source for **swine** during various stages of production. In vivo studies will examine the digestibility of triglycerides which vary in fatty acid composition. Lipids also will be fed with and without supplemental emulsifying agents to evaluate the impact on digestibility. Gastric and pancreatic lipase activities will be measured in vitro using various triglycerides as substrate.PR the life cycle of **swine**. The role of the vitamin-like compound, carnitine, on fat metabolism of young **swine**, fat utilization in gestation/lactation diets and the influence of various dietary fats fed to finishing **swine** on pork fat quality have been examined. Results have shown variable responses to supplemental carnitine from suckling through the nursery period. Evidence suggests that supplementation during the nursery period may improve dietary fat utilization and improve nitrogen balance. Piglet growth responses to supplemental medium- and long-chain triglycerides in the diets of the dam also have been described. Finally, research on this project has shown that in the finishing phase of production, dietary fats may be manipulated with respect to saturation state to favorably affect bacon processing. Specifically, chemically-**hydrogenated fats** and conjugated linoleic acid many be used effectively for this purpose.PB

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=> s belly firmness and hydrogenated fat (10a) feed######## and (swine or pig
UNMATCHED LEFT PARENTHESIS 'AND (SWINE'
The number of right parentheses in a query must be equal to the
number of left parentheses.

=>  s belly firmness and hydrogenated fat (10a) feed######## and (swine or pig)
L4            0 BELLY FIRMNESS AND HYDROGENATED FAT (10A) FEED######## AND (SWIN
                E OR PIG)

=> s belly firmness and saturated fat (20a) feed###### and (swine or pig)
  11 FILES SEARCHED...
L5            0 BELLY FIRMNESS AND SATURATED FAT (20A) FEED###### AND (SWINE OR
                PIG)
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